

**AMPEX**

# VPR-4500 Color Video Production Reproducer

*featuring advanced new Ampex 1 INCH VPR design*





**NEW AMPEX  
ONE-INCH  
VPR  
COMPATIBLE  
DESIGN**

Originator and leading manufacturer of videotape recorders, Ampex now makes "the best" even better

## now... Ampex introduces a new videotape reproducer for CCTV and CATV applications

*THIS COMPACT, LOW-COST UNIT PROVIDES EXCELLENT VIDEOTAPE PLAYBACK—IS IDEAL WHERE RECORDER CAPABILITY IS NOT NEEDED*

Proudly bred from the rugged, quality-proved Ampex VR series, this advanced new reproducer unit gives you the identical Ampex-developed one-inch helical scan format—but now with new performance and convenience features.

Because it is compatibly designed as an ancillary part of the exciting, whole new generation of Ampex Video Production Recorders, this reproducer has the same distinguished VPR designation.

The VPR-4500C provides Color and Black-and-White reproduction. This unit is also available as VPR-4500 for Black-and-White reproduction only, and is easily field upgradeable to Color reproduction with the optional AC-131 color kit.

The VPR-4500 is engineered specifically for use in the many applications where only the viewing of pre-recorded tapes is required or desirable. It can be obtained at substantial savings because you are not paying for the usual two-in-one unit with a built-in videotape recorder.

Thus, for those interested primarily in expanding the playback facilities of their CCTV systems, the VPR-4500 unit provides an easy and economical way to get famous Ampex quality, performance and reliability features.

### CCTV APPLICATIONS

This new Ampex videotape reproducer is perfect for closed circuit television systems usually found in schools, hospitals, businesses and government agencies. In many of these cases, videotape presentations recorded at a studio, "home office" or other central point are duplicated and then distributed for viewing at "satellite" locations. Here are just a few of the many applications...

**AT SCHOOLS**—even classes in remote areas or of limited size can see and hear foremost teachers, artists and other authorities via videotape. And the tape can be viewed again and again!

**AT HOSPITALS**—surgeons, nurses or technicians can study new methods

videotaped at major medical centers throughout the world.

**IN BUSINESS AND INDUSTRY**—pre-recorded videotapes can be sent to branches or other locations for regional sales meetings... new product presentations... hands-at-work repair procedures... plus a variety of other applications designed to improve efficiency, save time and money.

Thanks to the one-inch helical scan format, together with Ampex engineering and quality craftsmanship, the VPR-4500 faithfully recreates pictures with all the sharpness and detail originally captured on the tape. Thus, you are assured that even videotaped technique or information of a critical nature—surgical procedures, close-ups of graphs, blue-prints and other subjects—will all be reproduced with utmost clarity.

### CATV APPLICATIONS

Operators of CATV systems will find the VPR-4500 extremely well suited to their particular requirements, providing crisp high-resolution pictures from all 1" tapes received from their regular programming distribution sources.

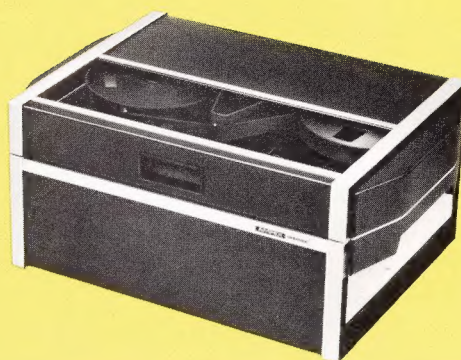
The VPR-4500 is ruggedly built for dependable day-in-day-out "on cable" transmission. Even if the unit will not be used every day, however, this new Ampex player is an excellent low-cost unit for emergency "stand-by" use—or for transmission duty when the studio recorder/player is being used to videotape local programs, commercials or your other origination material.



AMPEX VPR-4500C  
Color and Black-and-White Reproducer



**new features...more convenience...  
famous Ampex quality performance  
in new lightweight portable cabinetry**



**NEW EVIDENCE OF  
AMPEX LEADERSHIP**

With the introduction of the superb VPR-4500, Ampex again shows its leadership in product innovation and improvement. The unit offers finest playback performance features designed to provide pictures of exceptional quality.

In the VPR-4500, these features include the capability of playing back either low carrier black-and-white or high carrier black-and-white and color tapes. The instrument contains a built-in color corrector and, thus, features single-cable color or black-and-white to an external monitor. Horizontal picture resolution is 350 lines.

Frequency response of the VPR-4500 is 30 Hz to 4.2 MHz. Video signal to noise ratio is 43 db minimum, peak to peak composite signal to rms noise. These factors are a measure of picture quality, and indicate the high level of videotape playback performance.

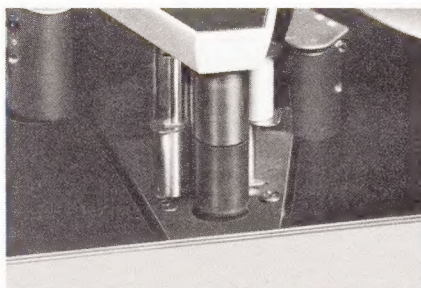
As with all Ampex products, the VPR-4500 playback unit is engineered and quality-built throughout to assure the utmost in dependable longlife operation.

**IT'S WISE TO GET AMPEX  
1" TAPE COMPATIBILITY**

Because it has the same highly efficient Ampex-developed one-inch, single-head, helical scan format, the VPR-4500 unit will play tapes recorded on any and all Ampex 1" models.

Here's why this tape interchangeability is so important: Ampex offers the industry's most complete line of equipment...thousands of 1" Ampex units are in daily use... and, in fact, the Ampex format is considered the "standard" by many producers of programming materials.

Ampex guarantees in writing that the videotapes in your library will always be fully playable no matter how much your teleproduction equipment may change within our 1" format. So for greatest system flexibility, too—Ampex is the wise choice!

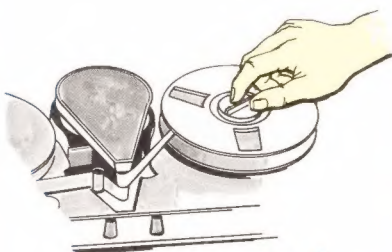


**new! EXCLUSIVE AMPEX  
SPLIT CAPSTAN**

This new Ampex capstan design, featured in all VPR recorders and players, gives Ampex units even greater capability to reproduce the finest possible videotape pictures.

Because there is almost always some variance between the levels of temperature and humidity when a videotape is recorded and when it is actually played back, Ampex units have always had a "Tension" control to compensate for picture distortion due to tape stretch or contraction. Now, however, with the new split capstan design in which the top half is driven and the bottom half is viscously coupled, Ampex has doubled the correction effect of the tension control.

It's many small things like this that also add up to the big Ampex difference in performance and reliability.



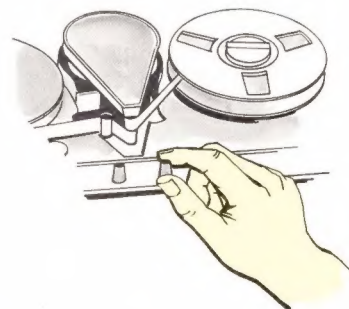
**new!  
AMPEX REEL "HOLD-DOWNS"**

New Ampex reel "Hold-Downs" can be quickly engaged or released with the turn of your wrist. Because they keep both reels snugly and securely in position, operation is quieter and smoother during fast forward and rewind modes, and reels can be left in place while the machine is being transported.

**new! FUNCTIONALLY  
DESIGNED CABINET... MORE  
EFFICIENT, EASY TO CARRY**

The handsomely styled VPR-4500 aluminum cabinet is sturdily constructed, and has large easy-grip handles for convenient portability. The new Ampex "hold-downs" keep reels securely in position at all times.

The new hinged, removable dust cover also makes for ultra-quiet operation. The transparent smoked plexiglass window lets the operator observe the controls and check performance during operation. The VPR-4500 weighs only 73 pounds. Cabinet dimensions are 26 1/4" long x 18 1/4" deep x 12 1/4" high.



**EASY TO OPERATE**

The VPR-4500 reproducer is designed so that virtually anyone can operate it. Just thread the tape and push the "Play" button. Its simplicity and ease of operation makes it especially ideal for classroom or conference use. Convenience of operation is enhanced by short forward/rewind times.

**YOU CAN DEPEND ON AMPEX  
ALL THE WAY**

You'll find that Ampex experience and leadership in videotape systems can help you more! Ampex equipment, technical help and back-up service are always quickly available at Ampex dealers and branches throughout the country. Rental, leasing and time payment plans are available if you prefer.



AMPEX

# VPR-4500 Color Video Production Reproducer

## SPECIFICATIONS

### General

**POWER REQUIREMENTS:** 105 to 125 volts, 60 cycle at 2½ amps. Detachable 3-wire power cable and plug.

**TAPE SPEED:** 9.6 ips.

**VIDEO WRITING SPEED:** 1000 ips.

**ROTARY HEAD LIFE:** 500 hrs. min. Uses a single plug-in field interchangeable rotary head.

**REWIND TIME:** 5 minutes (for 3000 ft. of tape).

**FAST FORWARD TIME:** 5½ minutes (for 3000 ft. of tape).

**TAPE:** 1" wide, 1 mil mylar base video tape. 3000 ft. for 1 hr. playing time on 9¾" reel.

**CASE:** Vinyl clad sheet aluminum with die cast end frames; sturdy integrated handles. Hinged, removable dust cover of similar construction has smoked plexiglass window for observing machine during operation.

**SIZE:** Overall 26¼" x 18¼" x 12¼".

**WEIGHT:** 73 lbs.

**OPERATING POSITION:** Horizontal only.

### Video

#### PERFORMANCE SPECIFICATIONS:

**FREQUENCY RESPONSE:** 30 Hz to 4.2 MHz +2, -4db, high carrier mode.

**SIGNAL TO NOISE:** -40db, Peak-to-Peak video to rms noise; -43db, Peak-to-Peak composite signal to rms noise, high carrier mode.

**HORIZONTAL RESOLUTION:** 350 lines limiting visual resolution on playback of monoscope test pattern in high carrier mode.

#### OUTPUTS:

**MONOCHROME AND COLOR:** 75 ohms unbalanced, 1.0± 10% V. P-P UHF type connectors.

### Audio

#### PERFORMANCE SPECIFICATIONS:

**FREQUENCY RESPONSE:** ±4db, 90 Hz to 9 KHz.

**SIGNAL TO NOISE:** -42db @ 3.0 T.H.D.

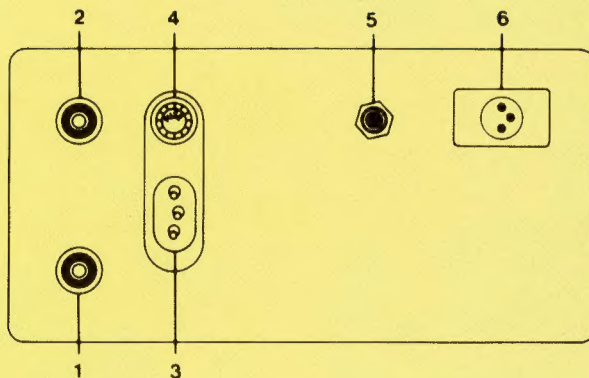
**FLUTTER AND WOW:** Flutter less than .3% rms. .5-250 Hz. Wow: less than .04% rms. .5-6 Hz. Measured according to ASA Standards.

#### OUTPUTS:

**LINE:** 10K ohm unbalanced, 1.0 volt nominal. XLR-3 type connector.

**SPEAKER/HEADPHONES:** 2 watts into 8 ohms (use of speaker/headphones output silences internal speaker).

### Rear Panel



1. **MONOCHROME VIDEO OUT:** Connects to a TV monitor or modified receiver.

2. **COLOR VIDEO OUT:** Connects to a TV monitor or modified receiver. (Applicable to VPR-4500C only.)

3. **AC IN:** 3 conductor grounding type.

4. **FUSE:** 5 amp. A.C. line.

5. **SPKR/PHONES OUTPUT:** A phone jack type receptacle which connects to an external speaker, speaker system, or headphones.

6. **AUDIO OUT:** A three prong receptacle (XL) which connects to an external unbalanced 10K ohm line.

AMPEX

### AMPEX CORPORATION

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*Descriptions and specifications subject to change without notice or obligation.*